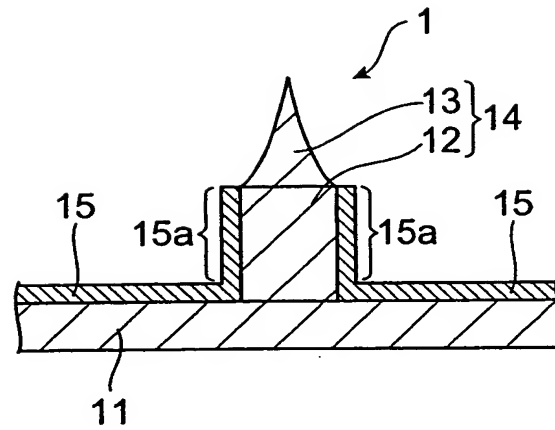
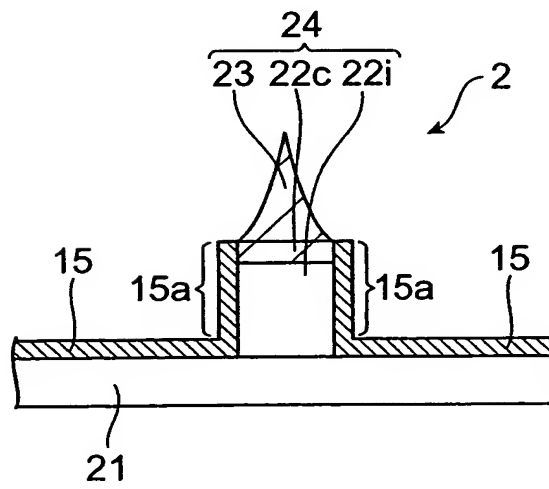


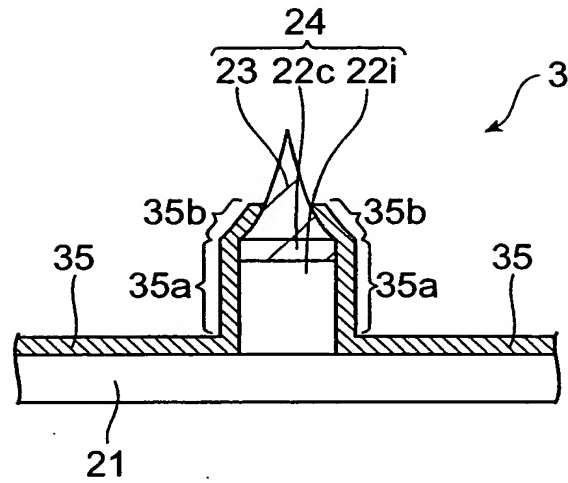
**Fig.1**



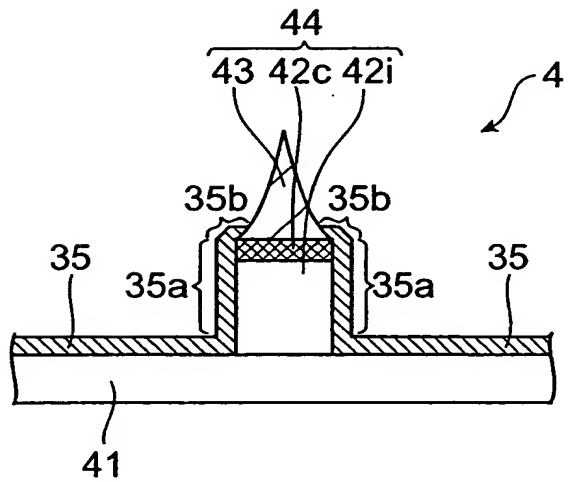
**Fig.2**



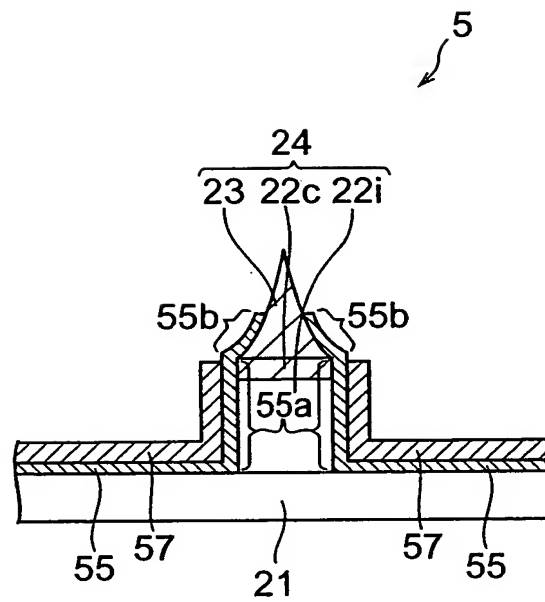
**Fig.3**



**Fig.4**

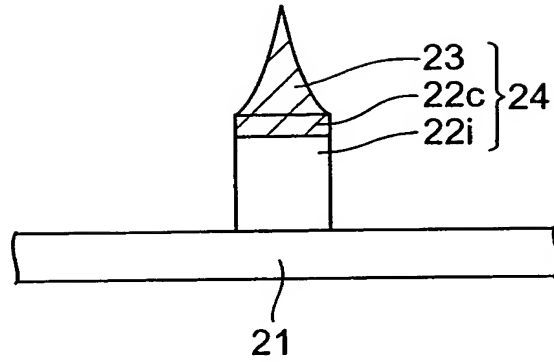


**Fig.5**

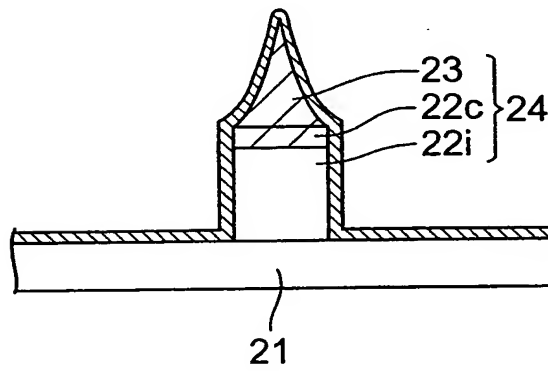


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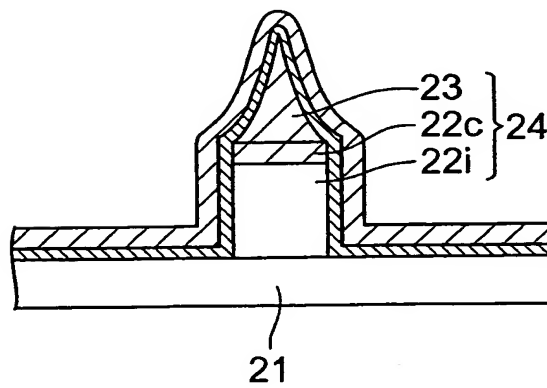
**Fig.6A**



**Fig.6B**

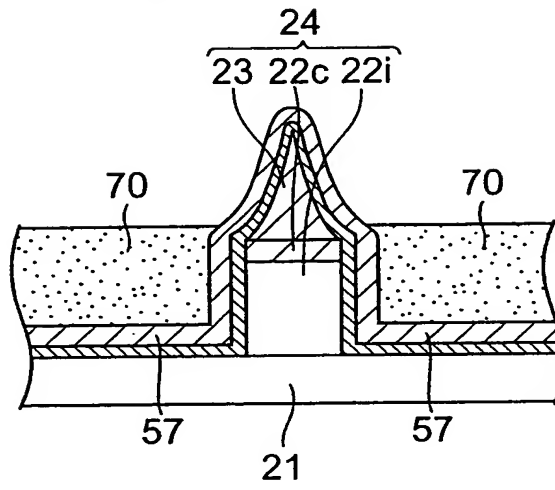


**Fig.6C**

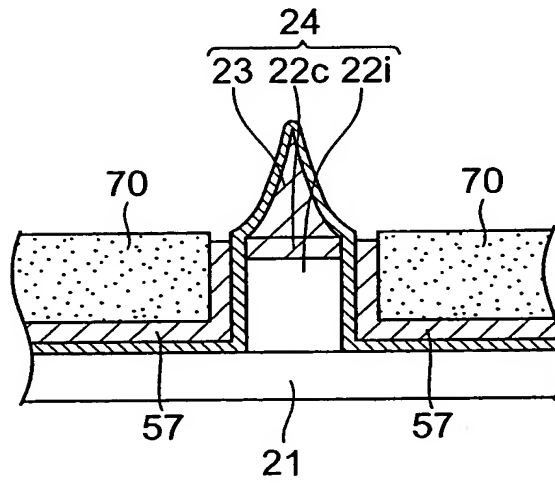


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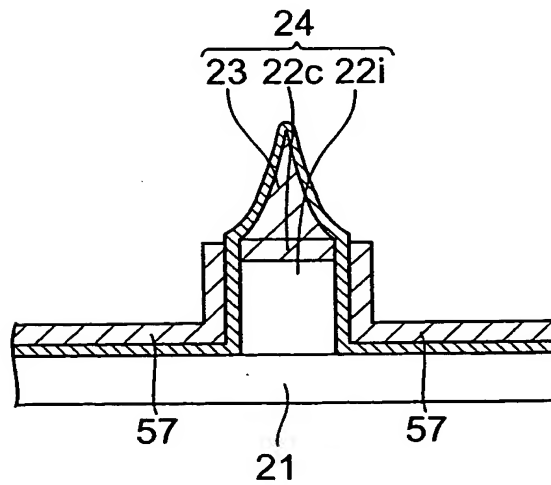
**Fig.7A**



**Fig.7B**

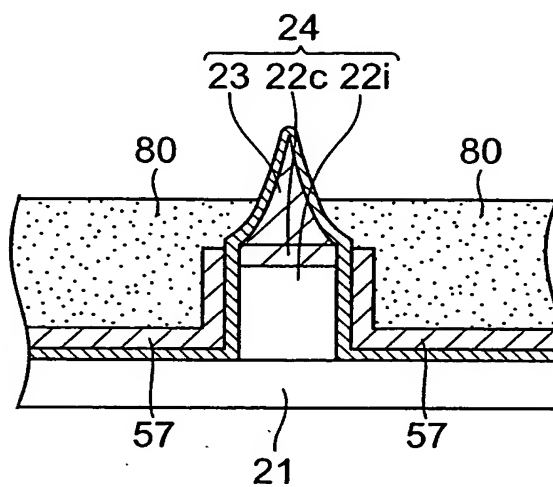


**Fig.7C**

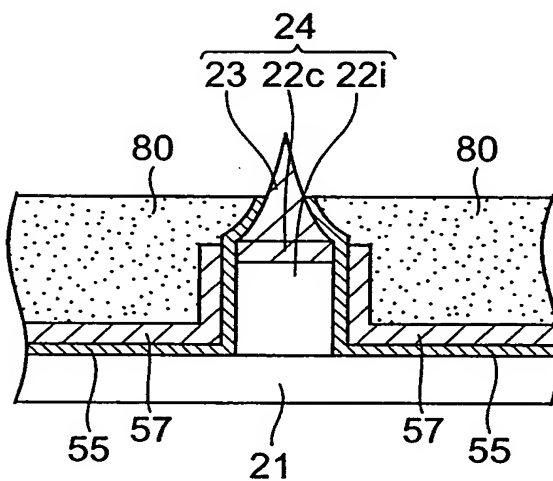


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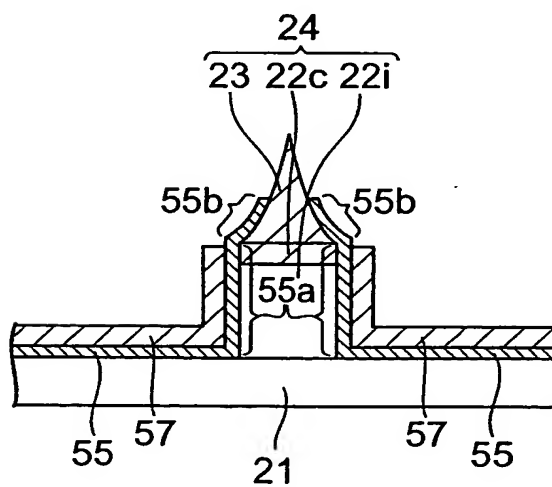
**Fig.8A**



**Fig.8B**

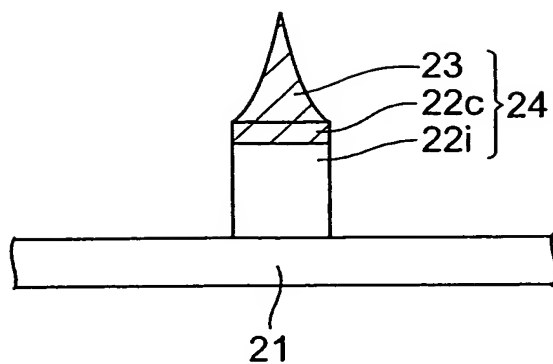


**Fig.8C**

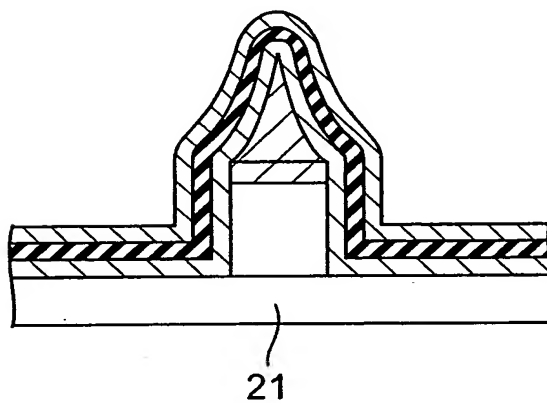


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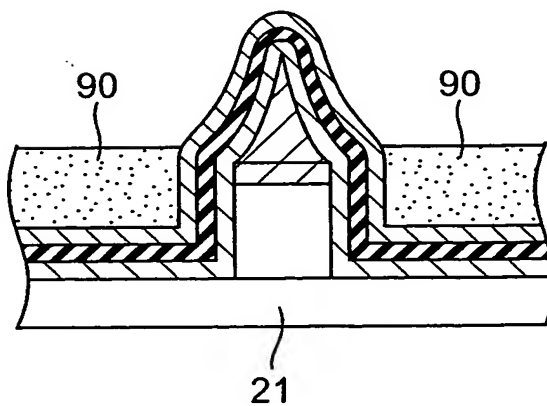
**Fig.9A**



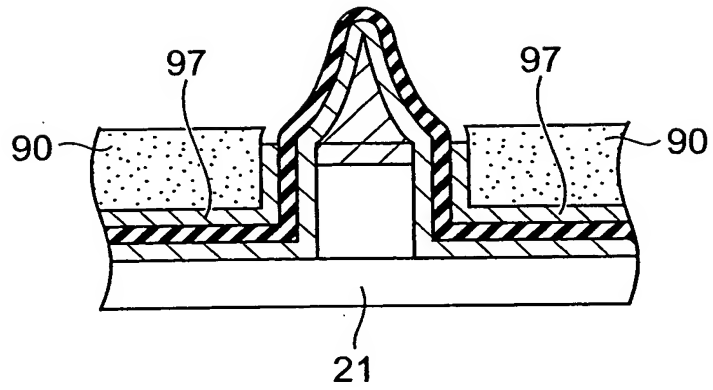
**Fig.9B**



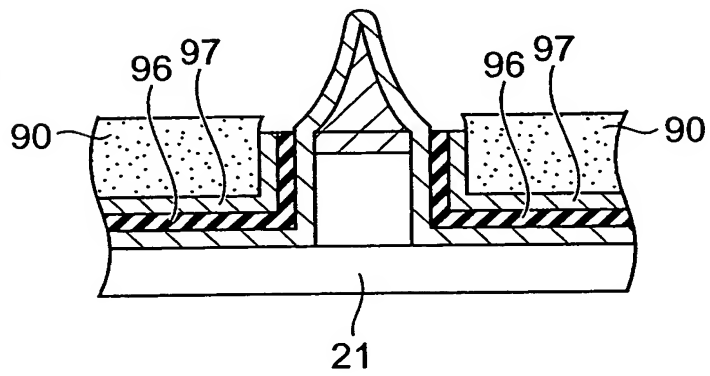
**Fig.9C**



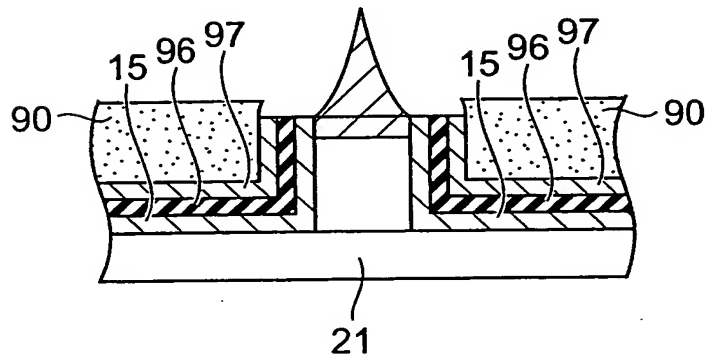
**Fig.10A**



**Fig.10B**

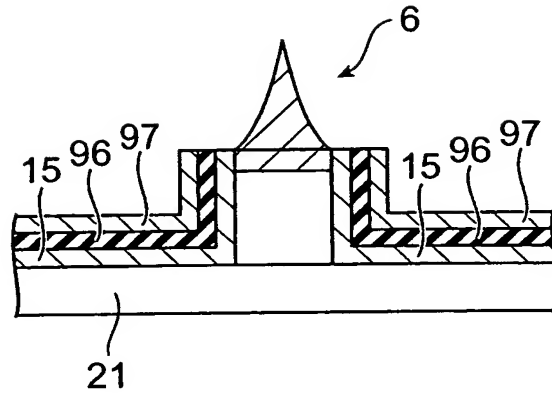


**Fig.10C**



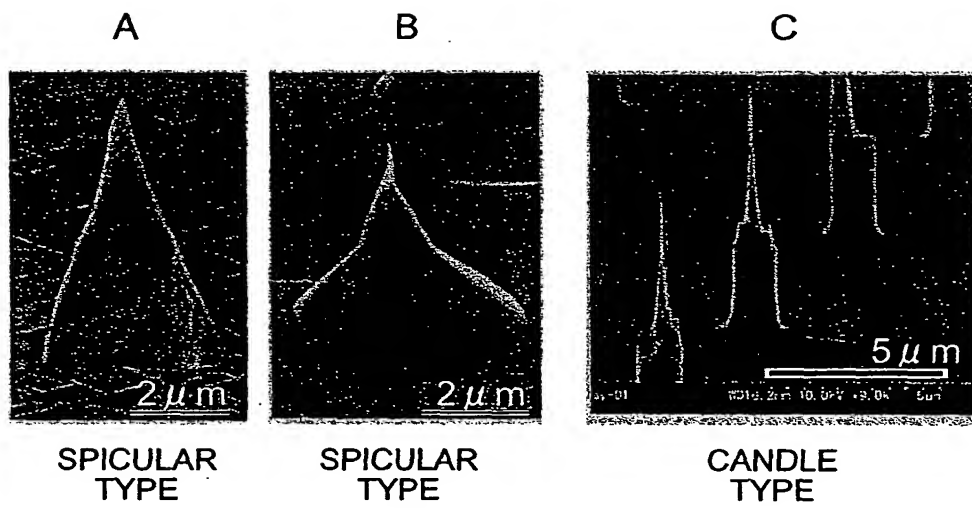


**Fig.11**



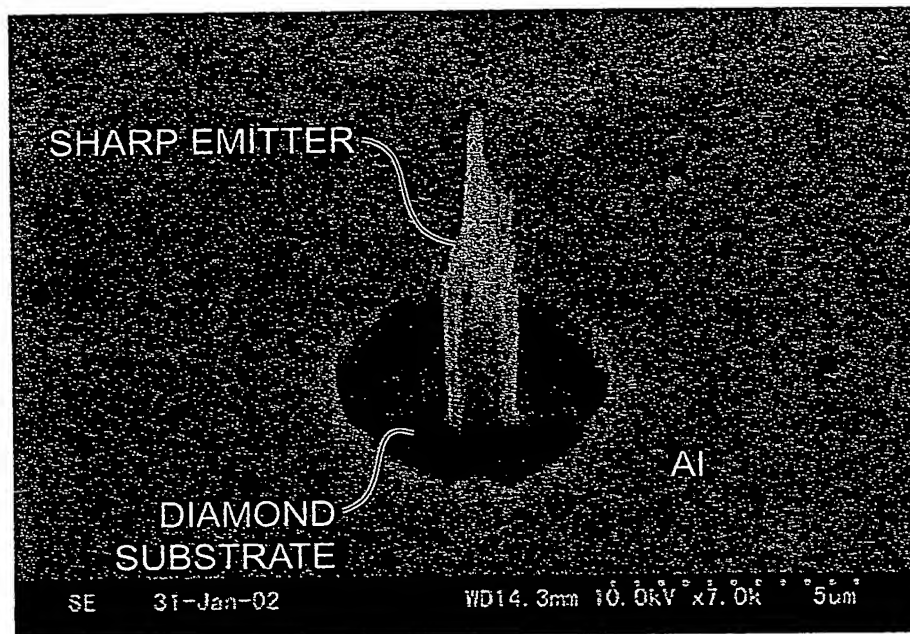
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**Fig.12**



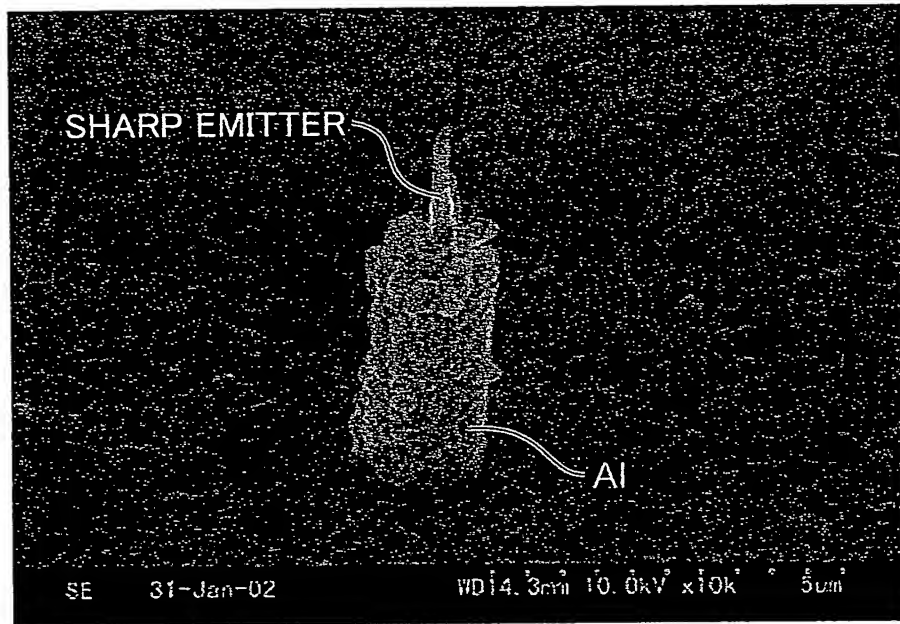
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**Fig.13**



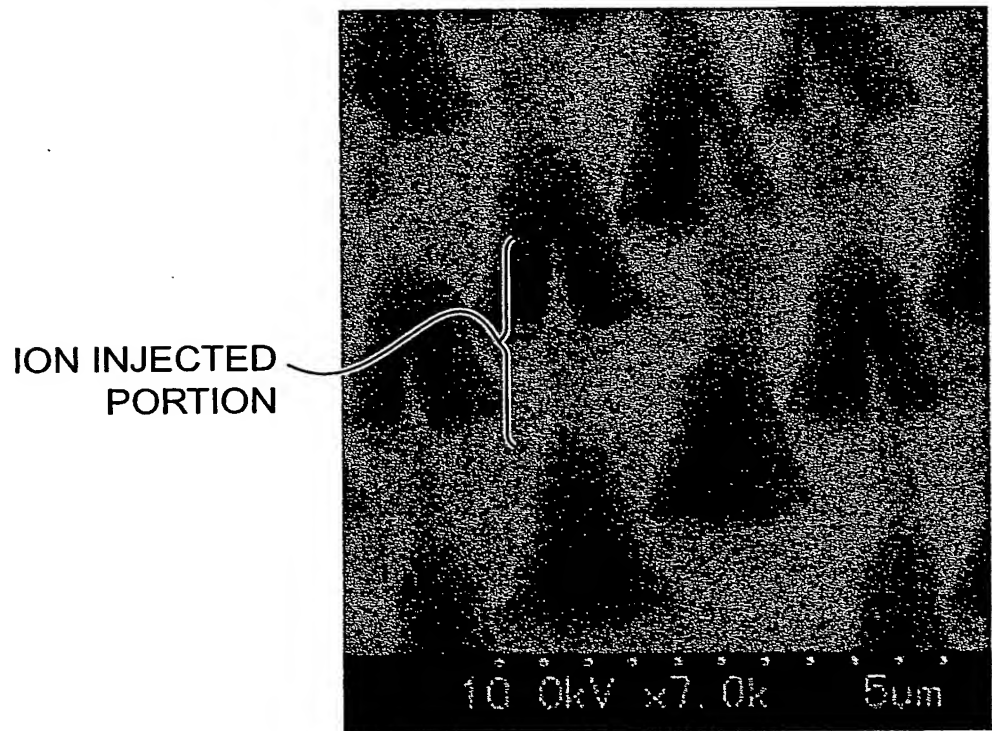
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**Fig.14**



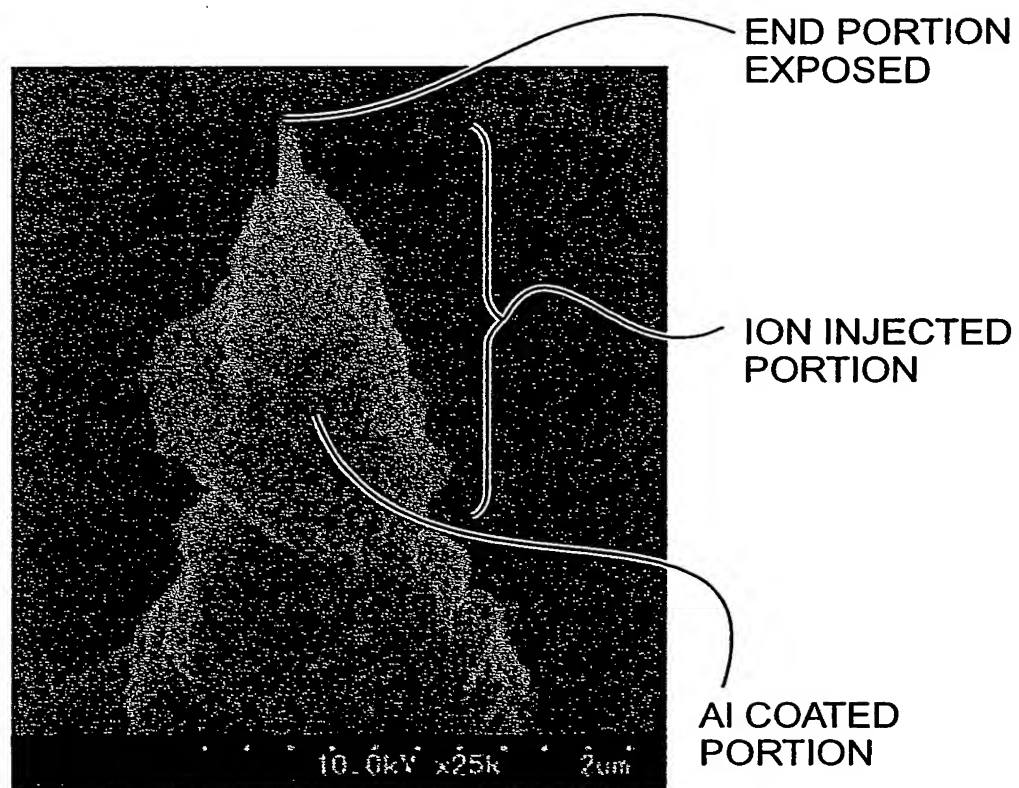
**SHARP EMITTER WITH AN AL ELECTRODE**

***Fig.15***



SHARP EMITTER  
WITH AN Al ION INJECTED LAYER

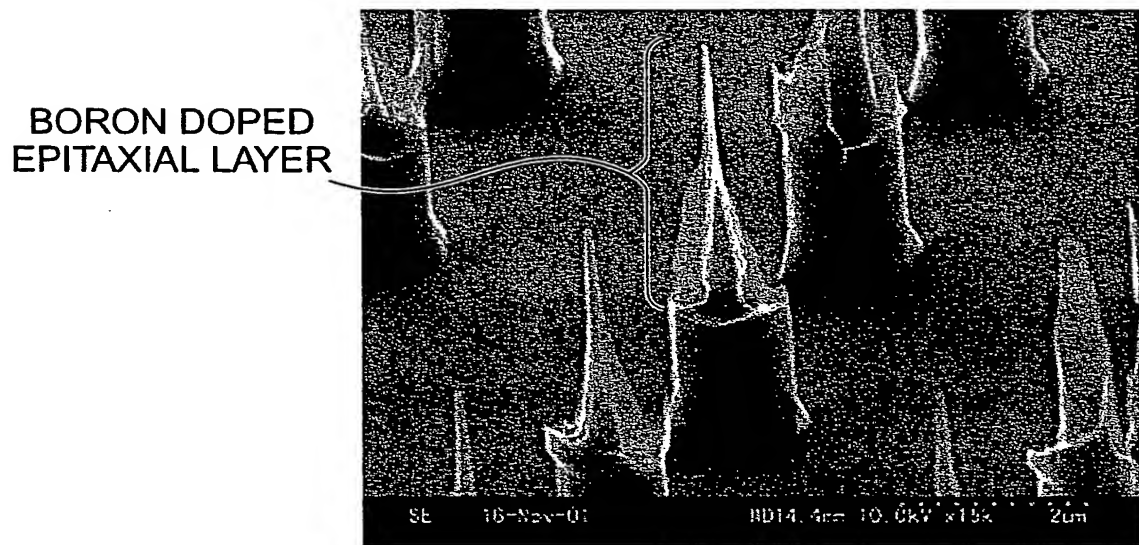
**Fig.16**



PROTRUSION WHERE AN Al ELECTRODE  
IS FORMED EXCEPT FOR THE TIP

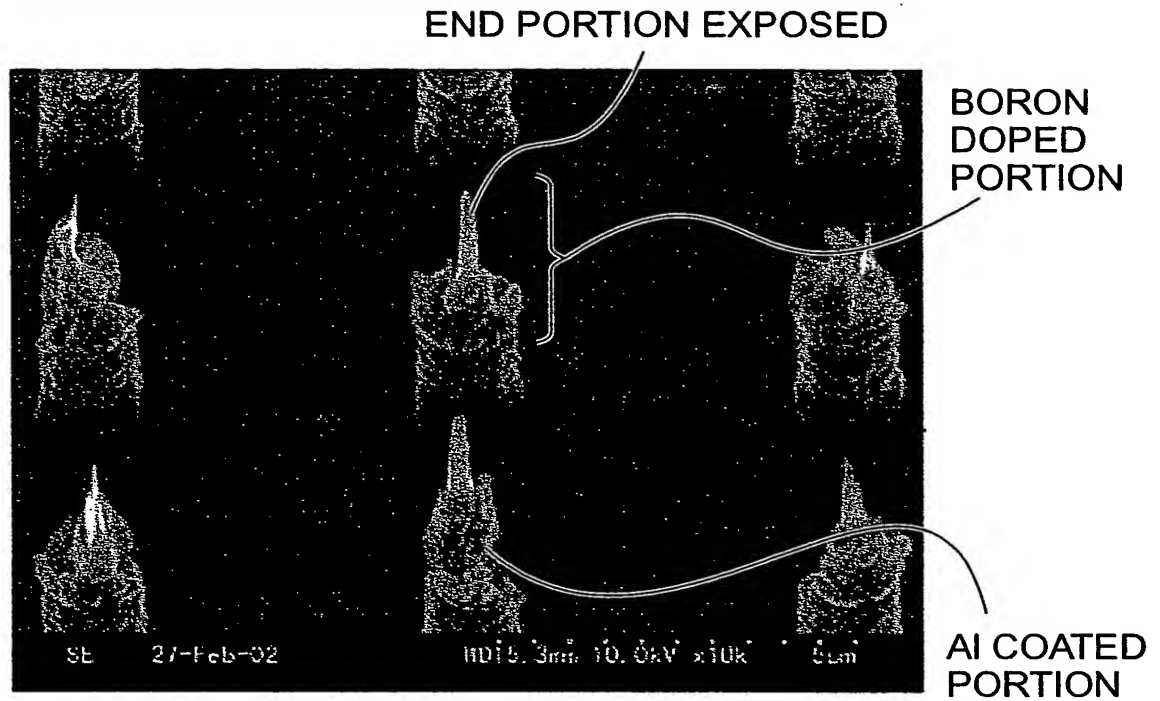
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***Fig.17***



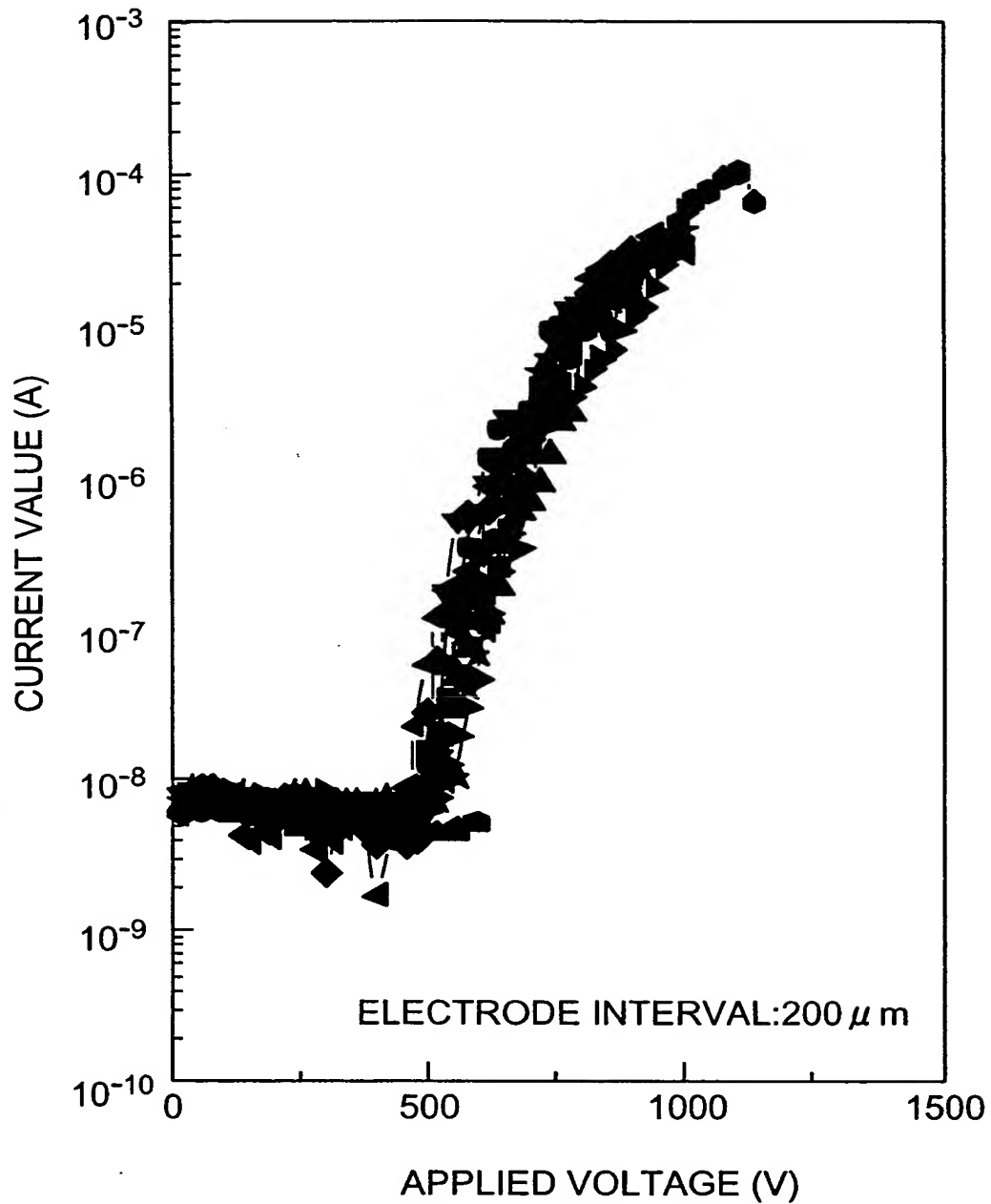
SHARP EMITTER INCLUDING  
A BORON DOPED EPITAXIAL LAYER

**Fig.18**

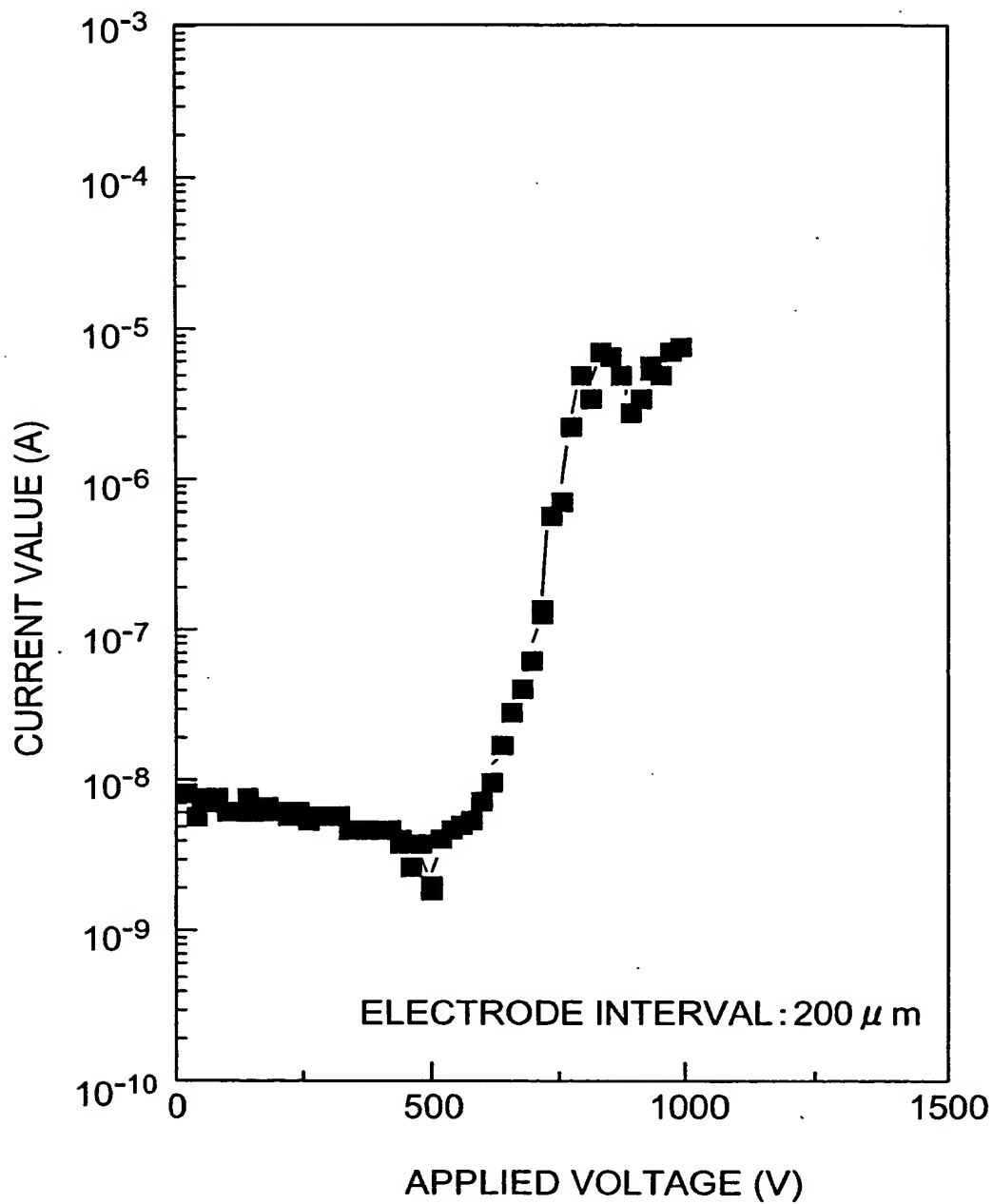


PROTRUSION WHERE AN AL ELECTRODE  
IS FORMED EXCEPT FOR THE END PORTION



**Fig.19**

ELECTRON EMISSION CHARACTERISTIC  
OF A SHARP EMITTER INCLUDING  
AN AI ION INJECTED LAYER  
AND BEING PROVIDED WITH AN AI ELECTRODE

**Fig.20**

ELECTRON EMISSION CHARACTERISTIC  
OF A SHARP EMITTER INCLUDING  
A BORON DOPED EXITAXIAL LAYER  
AND BEING PROVIDED WITH AN AL ELECTRODE